



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------|-------------|----------------------|---------------------|------------------|
| 10/803,917 | 03/19/2004 | Hiroshi Izawa | 03560.003432. | 6706 |
| 5514 | 7590 | 03/23/2006 | EXAMINER | |
| FITZPATRICK CELLA HARPER & SCINTO | | | MOORE, KARLA A | |
| 30 ROCKEFELLER PLAZA | | | ART UNIT | PAPER NUMBER |
| NEW YORK, NY 10112 | | | 1763 | |

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/803,917

Applicant(s)

IZAWA ET AL.

Examiner

Karla Moore

Art Unit

1763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0404.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims recite the limitation "the winding unit". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 4 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,198,243 to Shimizu.

5. Shimizu discloses an apparatus for processing a substrate (Figure 1, 3) intermittently transferred, comprising: a transferring unit, including a plurality of transfer rollers (4-21) for transferring a substrate; and at least one removing unit (22-25) for removing foreign substances present on the curved surface of one of the rotary rollers.

6. With respect to claims 2 and 9, a plurality of the removing units are disclosed, therefore there are a plurality of "upstream" and "downstream units", as well as one spaced close to a "winding unit" (1).

7. With respect to claim 4, each of the removing units includes a contact removing member (26).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 3, 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu as applied to claims 1, 2, 4 and 9 above in view of U.S. Patent No. 4,901,666 to Nagasaka et al.

11. Shimizu discloses the invention substantially as claimed and as described above.

12. However, Shimizu fail to teach an electrifying/diselectrifying member for electrifying the removing unit, the removing unit including a gas blower and a capturing unit for capturing foreign substances.

13. Nagasaka et al. teach an apparatus for removing foreign substances from a substrate support device comprising an electrifying/diselectrifying member (Figure 6, 25), a gas blower (24); and a capturing unit for the purpose of providing a substrate support cleaning/removing apparatus for accumulating foreign matter that would cause defective contact failure (column 6, row 42 through column 7, row 46).

14. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a cleaning removing apparatus comprising an electrifying/diselectrifying member, a gas blower; and a capturing unit in Shimizu in order to provide a cleaning/removing apparatus capable of accumulating foreign matter that would cause defective contact failure as taught by Nagasaka et al.

Art Unit: 1763

15. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu as applied to claims 1, 2, 4 and 9 and as described below.

16. Shimizu discloses the invention substantially as claimed and as described above.

17. However, Shimizu fails to explicitly disclose the removing unit having a surface resistivity of at least 10^{12} ohm/sq or a volume resistivity of at least 10^{11} ohm*cm.

18. However, Shimizu does disclose that the material of the removing unit must be chosen to be capable of cleaning the transfer roller. Thus, the material chosen would depend on the material of the transfer roller to be cleaned.

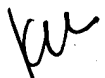
19. It would have been obvious to one of ordinary skill in the art to choose a removing unit with a surface resistivity or volume resistivity compatible with the material of the roller to be cleaned as taught by Shimizu.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 571.272.1440. The examiner can normally be reached on Monday-Friday, 9:00 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Karla Moore
Patent Examiner
Art Unit 1763
18 March 2006